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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/240,265	01/29/1999	MARK E. PETERS	CR9-98-095	7166

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IBM CORPORATION
3039 CROWWALLIS RD.
DEPT. T81 / B503, PO BOX 12195
REASEARCH TRIANGLE PARK, NC 27709

EXAMINER

MEISLAHN, DOUGLAS J

ART UNIT

PAPER NUMBER

2132

DATE MAILED: 04/15/2003

b

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/240,265	PETERS, MARK E.
	Examiner	Art Unit
	Douglas J. Meislahn	2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 February 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed 12 February 2003 that added claims 4-6.

Response to Arguments

2. Applicant's arguments filed 12 February 2003 have been fully considered but they are not persuasive.

3. In response to applicant's argument that the present invention does not transfer data that includes a list of cryptographic algorithms, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

4. In a reasonably broad interpretation of the claims, "extension" is met by the added bits used in the list of algorithms of Shambroom.

5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

6. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Shear et al. is an obvious addition because, as has been stated in the rejection, it reduces risk. The benefits of using dissimilar algorithms, such as those mentioned by Schneier, are also explicitly detailed in the rejection.

7. Applicant's comments with respect to the 101 rejection do not actually provide any evidence for the claim that claims 1-3 recite functional structure for data, although it is interesting to note that applicant agrees that the claims recite data. Applicant's reference to Shear is irrelevant because Shear claims physical objects, as opposed to data.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-3 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-3 claim data, which is nonfunctional descriptive material. As such, embodying the data on a computer-readable would NOT make the claims statutory. See MPEP 706.03(a) and, especially, 2106 IV B 1 (b).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shambroom (5923756) and Schneier (Applied Cryptography) in view of Shear et al. (6157721).

In lines 32-35 of column 10, Shambroom discusses a certificate that includes a public key and list of one or more cryptographic algorithms supported by the entity associated with the public key. The certificate can resemble an X.509 certificate. On pages 574 and 575, Schneier describes the X.509 certificate. As can be seen in figure 24.2, the certificate includes a section that identifies the algorithm, parameters, and a public key. There is also a section for a signature. These read on the first clause of applicant's first claim. The list of algorithms disclosed in Shambroom also anticipates an extension for identifying at least one alternative algorithm. Shambroom does not dictate that a second public key and signature therefor be included in the certificate. In their abstract, Shear et al. say that using several dissimilar digital signature algorithms and their resultant signatures may "reduce the scope of any specific compromise." Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to put multiple signatures formed with different algorithms in Shambroom's exemplary X.509 certificate, thereby protecting the data from

compromise. Inclusion of the secondary public key in the certificate would save an authenticator from tracking it down, thereby increasing efficiency.

With respect to claim 2, pages 480 and 481 of Schneier discuss elliptic curve public key systems. RSA is first mentioned on page 17. According to Schneier, it is the most popular public-key algorithm. There are trade-offs between the two, particularly in terms of the relative computational workloads of the two entities (signer and verifier). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to support RSA and an elliptic curve cryptosystem with the X.509 certificate taught by Shambroom.

Both signatures verify at least part of the certificate and hence read on claim 3.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2132

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas J. Meislahn whose telephone number is (703) 305-1338. The examiner can normally be reached on between 9 AM and 6 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barrón can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Douglas J. Meislahn
Examiner
Art Unit 2132


DJM
April 10, 2003


GILBERTO BARRÓN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100